

CLAIMS

What is claimed is:

1. A floor latch apparatus for a vehicle seat comprising:
a housing member;
a locking member having a locking portion supported on said housing member for rotational displacement about a first axis;
an engaging member having an engaging portion supported on said housing member for rotational displacement about a second axis substantially parallel to said first axis; and
a biasing member disposed between said locking member and said engaging member adapted to bias said locking portion into engagement with said engaging portion in at least one plane substantially common with said first axis to produce at least one force acting on said engaging member through a point located between said first and second axes.
2. The apparatus of claim 1, wherein said locking and engaging portions include first and second engaging faces, respectively, engaged in said plane.
3. The apparatus of claim 1, wherein said locking and engaging portions include a plurality of asymmetrical teeth.

4. The apparatus of claim 1, further comprising a striker pin disposed on said housing member adapted to be selectively engaged by a claw portion of said locking member.

5. The apparatus of claim 1, wherein said engaging member includes a pawl portion for being engaged by said locking member and a lever portion for actuating said apparatus.

6. The apparatus of claim 5, wherein said biasing member is a coil spring having one end attached to said lever portion and another end attached to said locking member.

7. The apparatus of claim 1, wherein said locking portion includes a first plurality of teeth and said engaging portion includes a second plurality of teeth lesser in number than said first plurality of teeth such to provide for ratcheting engagement therebetween.

9. A floor latch apparatus for a vehicle seat comprising:

a housing;

a locking member having a first plurality of teeth supported on said housing for rotational displacement about a first axis;

an engaging member having a second plurality of teeth supported on said housing for rotational displacement about a second axis substantially parallel to said first axis; and

a biasing member disposed between said locking member and said engaging member adapted to bias said first and second pluralities of teeth into engagement in a plane substantially common with said first axis to exert a force acting on said engaging member through a point located between said first and second axes.

10. The apparatus of claim 9, further comprising a striker pin disposed on said housing member for being selectively engaged by a claw portion of said locking member.

11. The apparatus of claim 9, wherein said engaging member includes a pawl portion for being engaged by said locking member and a lever portion for actuating said apparatus.

12. The apparatus of claim 9, wherein said first and second pluralities of teeth include asymmetrical teeth.

13. The apparatus of claim 9, wherein said first plurality of teeth includes a greater number of teeth than said second plurality of teeth such to provide for ratcheting engagement therebetween.

14. The apparatus of claim 9, wherein said locking member applies a force to said engaging member through a point located between said first and second axes for maintaining engagement of said locking and engaging members.

15. The apparatus of claim 11, wherein said biasing member includes a coil spring having one end attached to said lever portion and another end attached to said locking member.

16. A vehicle seat assembly for a flip-type seat comprising:
a seat pivotally coupled to a vehicle;
a striker pin fixed to said vehicle; and
a latch attached to said seat for selectively engaging said striker pin to restrict pivotal movement of said seat;

said latch including a housing member, a locking member having a locking portion and supported on said housing member for rotational displacement about a first axis, an engaging member having an engaging portion and supported on said housing member for rotational displacement about a second axis substantially parallel to said first axis, and a biasing member disposed between said locking member and said engaging member adapted to bias said locking portion into engagement with said engaging portion in at least one plane substantially common with said first axis to produce at least one force acting on said engaging member through a point located between said first and second axes.

17. The assembly of claim 16, wherein said locking and engaging portions include first and second engaging faces, respectively, engaged in said plane.

18. The assembly of claim 16, wherein said locking and engaging portions include a plurality of asymmetrical teeth.

19. The assembly of claim 16, further comprising a striker pin disposed on said housing member adapted to be selectively engaged by a claw portion of said locking member.

20. The assembly of claim 16, wherein said engaging member includes a pawl portion for being engaged by said locking member and a lever portion for actuating said apparatus.

21. The assembly of claim 20, wherein said biasing member is a coil spring having one end attached to said lever portion and another end attached to said locking member.

22. The assembly of claim 16, wherein said locking portion includes a first plurality of teeth and said engaging portion includes a second plurality of teeth lesser in number than said first plurality of teeth such to provide for ratcheting engagement therebetween.

23. The assembly of claim 16, wherein said biasing member is a coil spring.

24. A vehicle seat assembly for a flip-type seat comprising:

a seat pivotally coupled to a vehicle;

a striker pin fixedly attached to said vehicle; and

a latch attached to said seat for selectively engaging said striker pin to restrict pivotal movement of said seat;

said latch including a housing, a locking member having a first plurality of teeth and supported on said housing for rotational displacement about a first axis, an engaging member having a second plurality of teeth and supported on said housing for rotational displacement about a second axis substantially parallel to said first axis, and a biasing member disposed between said locking member and said engaging member adapted to bias said first and second pluralities of teeth into engagement in a plane substantially common with said first axis.

25. The assembly of claim 24, further comprising a striker pin disposed on said housing member for being selectively engaged by a claw portion of said locking member.

26. The assembly of claim 24, wherein said engaging member includes a pawl portion for being engaged by said locking member and a lever portion for actuating said apparatus.

27. The assembly of claim 24, wherein said first and second pluralities of teeth include asymmetrical teeth.

28. The assembly of claim 24, wherein said first plurality of teeth includes a greater number of teeth than said second plurality of teeth such to provide for ratcheting engagement therebetween.

29. The assembly of claim 24, wherein said locking member applies a force to said engaging member through a point located between said first and second axes for maintaining engagement of said locking and engaging members.

30. The assembly of claim 26, wherein said biasing member includes a coil spring having one end attached to said lever portion and another end attached to said locking member.